

Serial No. 09/536,020

- 6 -

Art Unit: 2633

REMARKS

Reconsideration and further examination is respectfully requested. Claims 1-12 are currently pending. Claims 1-12 are rejected by way of the office action of June 5, 2003, and claims 1 and 11 are objected to. Claim 13 has been added. Claims

Applicants have amended the specification of the instant application to claim priority under 35 U.S.C. §119(e). The Examiner is thanked for mentioning this oversight to enable the Applicant to correct the omission.

Claim Objections:

Claims 1 and 11 were objected to for various informalities. The Applicant has amended the claims to remove the informalities, and therefore it is submitted that the objection has been overcome and should be withdrawn.

Rejections under 35 U.S.C. §112

Claim 8 was rejected under 35 U.S.C. §112, as being indefinite for failing to particularly point out and distinctly claim the subject matter of Applicant's invention. In particular, claim 8, an apparatus claim, included method steps which helped to make the claim unclear. Applicant has amended the claim to overcome this ground of rejection, and therefore it is submitted that the rejection should be withdrawn.

Rejections under 35 U.S.C. §103

Serial No. 09/536,020

- 7 -

Art Unit: 2633

Claims 1-3, 6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (U.S. 6,111,673) in view of Ohba et al (U.S. 6,501,754)

Chang, U.S. 6,111,673

Chang describes an optical signaling header technique applicable to optical networks wherein packet routing information is embedded in the same channel or wavelength as the data payload so that both the header and data payload propagate through network elements with the same path and the associated delays. (Abstract). Chang describes, at column 7, lines 63-col. 8 lines 5:

"... Optical signaling header 210 is a tag containing routing and control information such as the source, destination, priority and length of the packet, and propagates through optical network 201 preceding data payload 211. Each WDM network element 121-125 senses optical signaling header 210, looks-up a connection table (discussed later), and takes necessary steps such as cross-connections, add, drop, or drop-and-continue. The connection table is constantly updated by continuous communication between NC&M..."

At column 8, lines 25-35, Chang describes:

"... The preferred wavelength is defaulted to the original wavelength... If this preferred path at the default wavelength is already occupied by another packet, then network element 121 quickly decides if there is an available alternate wavelength WA through the same preferred path. This wavelength must be one of the choices offered by the limited wavelength conversion in network element 121..."

At column 9, lines 16-25 "... module 132 accepts the electrical signal from IP router 111, converts the electrical signal to a desired compliant wavelength optical signal, and places optical header 210 in front of the entire packet..."

Ohba:

Serial No. 09/536,020

- 8 -

Art Unit: 2633

Ohba describes a node device and a label switch path loop detection method which are capable of detecting a label switched path loop efficiently and quickly. (Abstract).

Combination neither describes nor suggests the claimed invention

Thus, while Chang describes that signals *are converted to optical wavelengths*, Chang neither describes nor suggests actually forwarding the value of the wavelength, as recited in the claims of the present application. For example, Claim 1 recites "...A label switching routing method for multi-protocol label switching (MPLS) optical communications network, comprising ... establishing a datapath as a sequence of labels between a source and a sink in said optical communications network, wherein each label includes a field identifying a communication attribute of the portion of the datapath associated with the label, wherein the communication attribute is selected from a group consisting essentially of a wavelength, frequency, shim or time slot that is used for communication in a corresponding portion of the sequence, converting a first wavelength having a first label to a second wavelength having a second label and forwarding the traffic to said sink according to said datapath, including updating the sequence of labels to replace the first label with the second label; and transmitting said second wavelength label to said source.."

Independent claim 8 recites means for *providing a label having a wavelength field for indicating a communication attribute of a communication path of the OTXC... the communication attribute selected from a group consisting essentially of wavelength, frequency, shim and time slot;*" and newly added claim 13 recites "...means for defining a datapath between the source and sink nodes, the datapath being represented as a sequence of labels, each label identifying a path between a pair of nodes in the datapath, and identifying a communication attribute of a portion of the datapath associated with the label, the communication attribute selected from a group consisting essentially of wavelength, frequency, shim and time slot, the wavelength field for storing a value of the respective communication attribute used to communicate in the portion of the datapath." Similarly, Ohba neither describes nor suggests a

Serial No. 09/536,020

- 9 -

Art Unit: 2633

feature wherein the label includes a wavelength field for indicating an optical wavelength used in communication. Accordingly, the combination of Ohba and Chang neither describe nor suggest the limitation of the claims, and as such the rejection is overcome and should be withdrawn.

Claims 2-7 and 9-12 depend upon independent claims 1 and 8, serve to add further patentable limitations to their parent independent claims and therefore are allowable with their parent claims for at least the reasons cited above.

Claims 2-5 and 11-12 were rejected under 35 U.S.C. §103 as being unpatentable over Chang in view of Ohba and further in view of Taylor (U.S. Patent 5,938,309)

Taylor describes the use of optical remodulators configured to receive an optical signal, separate the information from that optical signal into N information streams, and place the information into N optical channels within the channel plan of a WDM optical system.

The Examiner relies on Taylor as teaching the elements of the 'timeslot' of the claims. However, Applicants disagree. No teaching or suggestion is made in Taylor, Chang, Ohba or the combination thereof of "...a composite label having a wavelength portion and timeslot portion..." as recited in claim 2. Accordingly, for at least this reason claim 2 is patentably distinct over the combination. Claims 3-5 serve to limit claim 2 and are therefore allowable with claim 2. Claim 11 is allowable because the combination neither describes nor suggests "whenever said wavelength arrives with an attached timeslot.." Claim 12 serves to limit claim 11.

Serial No. 09/536,020

- 10 -

Art Unit: 2633

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Lindsay G. McGuinness, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

10/16/2003
Date

Lindsay G. McGuinness
Lindsay G. McGuinness, Reg. No. 38,549
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
30 Nagog Park Drive
Acton, MA 01720
(978) 264-6664

Docket No. 08-886180US1 120-286
Dd: 9/5/03

RECEIVED
CENTRAL FAX CENTER

OCT 16 2003

OFFICIAL